MOBILE TEAM WORKSHOP
IN
CURRICULUM DEVELOPMENT

Report of Observation-cum-Study Visits to Philippines, Japan, Republic of South Korea and Thailand

5 December 1977 to 29 December 1977

INDIA TEAM

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Mobile Team Workshop in Curriculum Development

Report of the First Phase

I. BACKGROUND

As part of a well-conceived and demonstrably comprehensive programme of helping the Member States create and strengthen national capabilities for the development and use of innovative practices in education, the Asian Centre of Educational Innovation for Development (ACEID) has undertaken, among others, a programme of organising a series of Mobile Team Workshops in curriculum development for training a national faculty and a core of curriculum developers through inter-country study-visits followed by an intra-country training workshop. Four such workshops for Afghanistan, Nepal, Bangladesh and Thailand have already been fielded by ACEID during 1975 and 1976. The present one for India is fifth in this series.

The objective of these workshops as indicated by ACEID is basically to fulfil the urgent training needs of selected countries for training of curriculum personnel in basic knowledge and skills required to perform their initiatory tasks in curriculum development. Specifically the workshop aims at :

(*i*) Exploring and identifying innovative curricular practices in the countries visited ;

(*ii*) Planning a tentative workshop programme to be organized in the country after these visits ;

(*iii*) Organizing and conducting the National Mobile Team Workshop ; and

(*iv*) Designing innovative approaches and planning for curriculum regeneration, with focus on education for development.

The first phase of the workshop, in our case, which consisted of inter-country visits has now ended. The present report is based on the the experiences and observations gained by the team during the visits.

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II. PLAN OF THE REPORT

Besides giving a brief description of the Institutions visited and discussions held, the report aims at highlighting those aspects of our study which have particular relevance to curriculum development and its use. Inferences are drawn as to transferability of some of the observed curricular practices to Indian situation Special attention has been given to the trends which suggest a definite bias towards relating curriculum to national development goals.

III. GENERAL AND SPECIFIC OBJECTIVES OF THE VISITS

The general objectives of the visits were determined by the focus of the In-country Advanced Workshop in Curriculum Development, which is planned for April/May, 1978. The general objectives are as under :

(*i*) to make curriculum relevant to life needs of the people ;

(*ii*) to organize education for rural development ;

(*iii*) to universalize education in the quickest possible time in order to deliver its benefits to the poor and disadvantaged sections of the population ;

(*iv*) to relate education to work in order to draw out the best in terms of skill and attitude development ;

(*v*) to bridge the gap between formal and non-formal systems of education so as to draw out the best of each for better and fuller development of the individual and the society. The idea here is to see how formal system could be suitably deformalized and how a non-formal system could be given a shape and form for purposes of organization and implementation;

(*vi*) to evolve and employ evalution strategies appropriate to the newly evolved educational goals of pupil development and social transformation.

Specific objectives

The specific objectives of our visits were governed by the activities proposed to be undertaken during the in-country workshop. The following specific objectives may be mentioned :

(*i*) to study materials and techniques developed by the country visited, which are being successfully used in curriculum development and implementation ;

(*ii*) to study the strategy and mechanism employed in the utilization of resources available in each country ;

(*iii*) to study the constraints which have hampered the developmental processes ,

(*iv*) to study the major trends in the direction of educational change ;

(*v*) to study in detail the innovative practices with a view to guaging their viability and also their impact on the social life of the community ;

(*vi*) to study job-oriented vocational education at the school level and its integration with education in general ;

(*vii*) to study the component of non-formal education relevant for community development and linkage of formal education with non-formal education ;

(*viii*) to study the new strategies in teacher education in relation to curriculum development ;

(*ix*) to study the changes introduced in the content of the subjects of study, and the purposes and goals governing such changes.

(*x*) to study the curriculum research and evaluation procedures.

In the pages which follow, the observations and impressions of the team have been so recorded as to reflect the above objectives. These observations and impressions have been discussed under the following heads :

(*i*) Education and National Development Goals
(*ii*) Innovative Practices in Curriculum Development
(*iii*) Relating Education to Work
(*iv*) Educational Materials and Techniques
(*v*) Teacher Education for Effective Implementation of Curriculum
(*vi*) Curriculum Research and Evaluation

IV. OBSERVATIONS AND IMPRESSIONS

1. Education and National Development Goals

Philippines

The idea that education must be relevant to national development goals has found full expression not only in the statement of educational objectives but also in the various programes and activities that have been introduced in the school curriculum

The national development goals of Philippines have been stated as under .

(*i*) To achieve and maintain an accelerating rate of economic development and social progress.

(*ii*) To assure the maximum participation of all the people in the attainment and enjoyment of the benefits of such growth.

(*iii*) To strengthen the national consciousness and promote desirable cultural values in a changing world.

The National Educational goals have been formulated keeping in view these above national development goals. Some of the important national educational goals and aims have been specified as under :

(*i*) All educational institutions shall be under the supervision of and subject to regulation by the State. The State shall establish and maintain a complete, adequate and integrated system of education relevant to the goals of national development.

(*ii*) The study of the Constitution shall be part of the curricula in all schools.

(*iii*) All the educational institutions shall aim at inculcating love of the country, teach the duty of citizenship and develop moral character, personal discipline, and scientific, technological and vocational efficiency.

(*iv*) The State shall maintain a system of free public elementary education and in areas where finances permit must establish and maintain a system of free public education at least up to secondary level.

(*v*) The State shall provide citizenship and vocational training to adult citizen and out-of-school youth.

In terms of actual school programmes it is found that there is provision for a broad general education that will assist each individual in the peculiar ecology of his own society to (*a*) attain his potential as human being, (*b*) enhance the range and quality of the individual and group participation in the basic function of society, and (*c*) acquire the essential educational foundation for his development into a productive and versatile citizen. Furthermore, curricular changes are being introduced to train the manpower in the *middle-level* skills, required for national development and develop the *high level professions* that will provide leadership for the nation and apply new knowledge for improving the quality of human life. In the revised elementary and secondary school curricula beginning from 1973 considerable emphasis has been laid on character education which has been put as number 1 among subject areas, followed by work education, and physical education. Work education begins from grade III and the time devoted to it is found steadily increasing from 1/8 to 1/5 of the total time the child spends in the school. The amount of emphasis work education gets in curriculum comes only next to *language arts*.

At the secondary level too, the revised curriculum aims at making secondary education more functional and self-contained by de-emphasizing its earlier college-preparatory nature. The minimum learning needs have been specified at the elementary level and are worth mentioning. They are : (*i*) positive attitudes, (*ii*) functional literacy, (*iii*) a scientific outlook and an elementary understanding of the processes of nature in areas like health and sanitation, nutrition, raising crops and animals, food storage and preparation, and environment and its protection, (*iv*) functional knowledge and skill for raising a family and operating a household, (*v*) functional knowledge and skill for earning a living including not only the skill required for a particular local occupation but also a knowledge of a variety of locally useful common skills for agriculture and non-farm use, (*vi*) functional knowledge and skill for civic participation. There is, thus, a clear shift from mere literacy as a goal of elementary education to the development of a child as a learner, as a worker, and as a person which is exactly what is needed in education today

At the secondary levels the goals have been broadly classified under three heads, viz., (*i*) continuation of general education started in elementary school, (*ii*) preparation for vocation, and (*iii*) preparation for college. Much intelligent thinking has gone into organizing secondary school curricula to achieve these three objectives. The most significant thing to notice is integration of work with education in a gradual and well-conceived fashion. A chart showing inclusion of vocational course in the secondary school curriculum has been given in Appendix 3A

Japan

The Constitution of Japan enacted in 1946 defines the basic right and duty of the people to receive education as follows ;

> "All people shall have the right to receive an equal education correspondent to their abilities, as provided for by law. The people shall be obligated to have all boys and girls under their protection receive general education as provided for by law. Such compulsory education shall be free". (Article 26)

The Fundamental Law of Education enacted in 1947 sets forth the basic national aims and principles of education in accordance with the spirit of the Constitution. The central aim of education is defined as bringing up self-reliant members of a peaceful and democratic community with respect for human values.

To achieve this aim specific national principles of education have been established by law, viz., equal opportunity of education, co-education, prohibition against partisan political education or sectarian religious education in public schools. With regard to equal opportunity of education, the law prohibits "discrimination according to race, creed, sex, social status, economic position or family background".

The above national goals find expression in the elementary, lower secondary, and upper secondary schools curricula. A conscious effort has been made to humanise education and to reduce study time to provide for personality development. The schools we visited provided ample testimony to the fact that these ideas are being actually translated into practice.

Republic of South Korea

The aims of Korean education have been embodied in the

Constitustion and Charter of National Education. While the Constitution presents the democratic ideals in a general context, the Charter of National Education promulgated on December 5, 1968 defines the ideals in terms of the objectives to be achieved by education. The goals of education reflected in the Charter of National Education may be considered in terms of (1) the spiritual base for the regeneration of nation, (2) the new image of the Korean people, and (3) ideological issues and missions.

Spiritual education is basic in the Charter of National Education which includes a clean and detailed definition of "National Spirit" as the willingness to perform the responsibilities and duties accompanied with freedom and to participate in services contributing toward national development. In this context, the policy guidelines are set forth as follows ;

(*i*) Citizenship education will be strengthened to develop the sense of responsibility inherent in the democratic society.

(*ii*) National ethics will be given a heavier weightage in the curricula at all stages, with emphasis placed on the revival of the traditional ethical norms such as filial piety, respect for aged people, altruistic ideals and mutual assistance. Educational efforts will be made to create a climate conducive to the practice of such ethical norms in family, school and society.

The new image of Korean people is being built through the You-shin (Reformation) movement. Efforts are made to improve educational content, instructional guidance and student learning activities in ways that ensure learning with a concern for its contribution toward individual and national development. Particular emphasis is placed on the development of scientific thinking and rational ways of living. Korean history is given a heavier weightage in the curricula at all stages to develop in the pupils a desirable national outlook and pride in the cultural heritage handed down by the forefathers. Attempts are also being made to strengthen education in non-formal setting, with the purpose of bringing about changes in the traditional value system of rural community. The schools try to devise a variety of programmes through which services beneficial to community people at large are provided. Further, the extended social function of education provides for the participation of teachers and students in eradicating inefficiency and other deterrents to community and national development. Schools play a leadership role in providing Saemaul Education (New Community Education). Educational programmes are re-organized so as to foster self-help, industriousness and cooperation through experimental learning activities. Attempts are being made to maximize the social functions of the school. Quite a number of schools serve as community centres spearheading and coordinating the movement, and the teachers and students play leadership roles in all community development activities.

Thailand

Similar to other developing countries, Thailand has considered the need for accelerating the pace of development through education. It has been felt that curriculum should be relevant to the learner and the society. Thus the national curricula are developed keeping national and educational goals in view. The national development goals have been specified as follows :

(*i*) Education for the masses
(*ii*) Education for daily life
(*iii*) Education for national unity with regional variations.

2. Innovative Practices in Curriculum Development

It is not the purpose of this report to discuss in detail the elementary and secondary school curricula. What is aimed at is to highlight those innovative aspects which make education more functional and socially relevant.

Philippines

As has been said above, the school curriculum has been designed specifically to meet the national development goals, and, the child is expected the develop a "reasoned commitment to the goals of national development".

Some of the important aspects of the school curriculum both at the elementary and secondary levels are the introduction of subjects like character education and work education at the elementary level, and Practical Arts/Vocational Courses and Youth Development and Citizen Army Training at the secondary level. It must be pointed out here that an attempt has been made to integrate character education functionally into all school activities both in and out of the school. The programme of Practial Arts/Vocational Education for which 600 to 900 minutes per week are allotted throughout the four years of secondary education includes Home-making Arts, Agriculture Arts, Business and Distributive Arts. It is envisaged that these programmes will expose the boys and girls to as many areas of Practical Arts as possible and develop trainability through occupational orientation, occupational understanding, and develop good work habits and ways of getting along with people in the occupations. During the first two years, the students go through exploratory experiences in at least three areas depending on the resources and facilities of the school and the economic needs of the community. At the end of the second year the student shall have selected one area in which he is particularly interested and in which he will get further training during the third and fourth years to make him a useful member of his family and to get initial employment after graduation.

Youth Development Training comprises scouting, physical education, health education and music foi the first, second and third-year students of high school with scouting taken two days every week, and each of the rest one day per week for the first semester During the second semester, Physical Education is conducted two days per week and each of the rest is taken one day per week. Citizen Army Training for all fourth-year students, boys and girls, in a course intended to provide basic Citizen Army Training is taken two days every week. Physical Education, Health and Music are taken once a week.

It may be relevant to point out here that the Revised Secondary Education Programme (1973) has mainly aimed at making education more functional and essentially suited to the varying needs of the child in a growing society. The first two years of secondary education is a common stream and the third and fourth years lead to either higher education or to specific vocational preparation and technical education.

An innovative feature of upper secondary education in Japan is that there are three types of upper secondary school courses : full-time, part-time, and correspondence. The full-time course lasts three years, while both the part-time and the correspondence courses four years or more. Part-time courses are of two types : day course and evening course.

In terms of the content of teaching provided, the upper secondary school course may also be classified into two categories : the general and the specialized. General courses provide general education adapted to the needs of both those who wish to go to higher education and those who are going to get employment but have chosen no specific vocational area

Specialized courses are intended to provide vocational or other specialized education for those students who have chosen a particular vocational area as their future career. These courses are further classified into several categories : technical, commercial, fishing, domestic arts, fine arts, science-mathematics, etc.

For vocational education, in addition to institutions of elementary, secondary and higher education, there are a variety of educational establishments known as "miscellaneous schools". The greater majority of these schools are privately controlled, and they train young people for vocational and practical courses in dressmaking cooking, book-keeping, typing, automobile driving and repairing, computer techniques, etc.

Most courses in Miscellaneous Schools require for admission the completion of lower secondary schooling, while some courses require the completion of an upper secondary school course. The duration of these courses varies, the shortest being three months. Generally it is one year.

About two-thirds of the students enrolled in Miscellaneous schools are women.

Another innovative feature of the Japanese education is the provision of facilities for "Social Education". In Japan there is an education sector called "Social Education" (Shakai Kyoiku) which means "organized educational activities mainly for youth and adults", other than those provided in the curricula of elementary and secondary schools or institutions of higher education.

Activities for social education are organized by both governmental and non-governmental bodies. Major public facilities for social education include " citizens' public halls", "youth houses", "children's nature centres", museums, and public libraries. The Citizens' Public Halls offer a variety of educational activities intended to help improve intellectual and cultural life of adults and youth living in the community. Such activities include the operation of different kinds of courses, classes, lectures, art exhibitions, film shows and meetings for physical training and recreation

Youth Houses (Seinen-no-ie) are public facilities designed to provide young people with opportunities for residential group training The activities of youth houses may be classified into two categories : (1) provision of a variety of short-term training courses for young people and youth leaders, and (2) assistance to groups of young people in organizing their educational programmes efficiently and effectively Any group of five persons or more who are youth leaders may be admitted to youth houses. A small sum is charged in some local ones.

Children's Nature Centres (Shonen-Shizen-no-ie) are social education facilities of a new type which is designed to provide children with an opportunity of making themselves familar with nature. They are located in rural areas with healthy natural environment.

These centres are intended to help children in spontaneous observation and study of nature and assist them through residential group activities in developing a sense of responsibility, respect for discipline, spirit of cooperation, friendship, and a will to serve other people. Children are provided at the Centre such unique experiences as may not be easily gained in school or family life. Such an approach for healthy physical, mental, and social development of the child is worth trying out as the dovelopment of a healthy citizenry is of peramount importance in India.

Republic of South Korea

Two outstanding innovative efforts toward regeneration of education are currently underway in the Republic of South Korea. One is the Elementary-Middle School Development Project and the other the Saemaul Education.

(*i*) *Elementary and middle school development project·* The Elementary and Middle School Development Project (E.M Project) is a national effort to improve the elementary and secondary education in Korea through a continuous programme of research and evaluation. Six main features of E.M. Project can be described as follows :

(*i*) Individual students are provided with more learning experiences with special emphasis on the development of higher mental processes such as problem-solving, critical thinking, and creative activity

(*ii*) Individual student are provided with more learning experiences for integration and acquisition of values and aptitudes, productive skills and knowledge that are uniquely needed for national development.

(*iii*) Learning progress of individual students is periodically monitored, and results are fed back into the teaching-learning processes.

(*iv*) Individual students have more opportunity for self-directed learning.

(*v*) A variety of learning resources through supplementary instructional material and media are available to help students achieve the major instructional objectives.

(*vi*) Individual students have access to a variety of learning resources and measures such as remedial and enrichment programmes, and flexible class room organization has been adopted to accomodate to individual differences in learning rate.

The E.M. Project is purported to develop a new educational system which offers quality education as well as provides for solution of varied problems facing Korean education. In fact the E.M. Project was a primary factor in the establishment of Korean Educational Development Institute (KEDI) which is now intensively engaged in the project. In contrast to the conventional reform programmes, the E.M. project systematically aims to bring about reforms in overall aspects of Education In other words, the immediate goal of E M Project is to develop a new educational system that is relevant to indigenous setting and to upgrade the quality of primary and middle school education.

(*ii*) *Saemaul education* : The Saemaul Education is a nationwide educational effort for rural development. Saemaul education originated in the movement for extending the social functions of education in the early 1960's. Underlying the movement was the principle that one of the basic functions of schools is to participate in the development activities of the community where they are located. The idea of Saemaul education came from Saemaul Movement (New Community Movement) proposed by President Park on April 22, 1970. The basic principle of government policy is to achieve a balanced development of agriculture and industry. Saemaul Movement based on this principle represents a determination to live a better life, and the main guidelines of the movement, are self-help, industriousness and cooperation. The conviction of the Korean people is that the education we need today is not simply for the sake of educating people but should be something closely related to productive activities. Thus the goal of Saemuul Education is to bring about an attitudinal re-orientation reflecting the spirit of Saemaul Movement, thereby, enabling students and the people of the community to contribute to the development of the community and the nation.

A few other innovations in Korean education may also be mentioned :

(*iii*) *Air and correspondence high school* : As an extended programme of social education, air and correspondence high schools were established, with a view to providing educational opportunities to the out-of-school youth and adults. This programme—first of its kind in Korea—is of great significance in that those unable to continue schooling can be exposed to various educational programmes of their choice and are enabled to enhance their effeciency in their respective fields.

(*iv*) *Youth guidance programme* . The Government has taken the intiative to give support to various youth guidance programmes which cater for the welfare of youth and help them develop a positive view of life. These programmes place emphasis on preventive measures for juvenile delinquency—rather than remedial measures—such as environmental clean-up and enlightenment programmes. The youth guidance programmes are concerned with the following areas ·

1. Health and physical improvement focusing on the development of motor skills and physical strength.
2. Emotional maturation aimed to cultivate desirable personality through arts, music and group activities
3 Facilitation of socialization.
4. Orientation about the future with the emphasis placed on the development of the ability to adapt to changing society.

Thailand

A committee for curriculum revision appointed in 1970 observed that existing curricula are subject-based, information-oriented, certificate-centred with rigid time-table. Moreover, there is little for individual differences among the pupils. The committee recomended designing of a new curriculum to provide general education which includes employable skills and at the same time assist the learner to realize his potential, enhance individual research and self-learning and stimulate critical thinking

The curriculum division in the *Department of Educational Technique* under Ministry of Education is entrusted with the responsibility of preparing relevant school curriculum in all subject areas except science and mathematics. Curriculum development for science and mathematics work is taken up by the Institute for the Promotion of Teaching of Science and Technology (IPST). The Institute also works under the supervision of Ministry of Education and is solely responsible for developing science and mathematics curricula and training teachers in teaching methods using tests, equipments and evaluation instruments developed at the Institute.

At present the school curricula are in the process of revision. At the primary level, effort is being made to evolve an integrated curriculum taking into account subject areas for basic skills, life experiences and character education. The emphasis is to prepare the child not only as a learner but also as a worker and also prepare him for a useful life in the community. At the secondary level, a useful feature which is being introduced in the school curriculum is the provision of life-based functional science education for non-science students.

3. Relating Education to Work

In all the four countries we visited we found that increasingly greater emphasis is being laid on work education in the school curriculum, the underlying idea being that the child has to be provided an opportunity to develop employable skills while he is still at school, thus facilitating his transfer from education to work. Of course, the nature and purposes of vocational courses provided at different levels are determined by the overall purposes of education at each stage. At the secondary stage however there is a conscious effort to introduce courses which would equip the child to take up some vocation, in case he does not go in for higher education. Provision is made for transfer from the vocational stream to the academic stream if the student so desires.

Philippines

The main thrust of secondary education in Philippines is toward a closer relationship with training and employment. According to state education authorities it is essentially a comprehensive career-oriented programme combining the desirable features of both pre-vocational and pre-college preparation with more stress on the former. Whether or not the intended stress will be implemented depends largely on how much resources will be provided to meet the standard requirements in terms of training facilities.

A brief account of some of the main features of vocational education in Philippines has been given in the following paragraphs :

(*i*) Work education as a separate subject area starts in grade III. The revised Educational Programme prescribes for this subject-area "those phases of work in agriculture, home-making and family living, industrial arts, retail trade and other activities designed to develop knowledge, attitudes, proper work habits and skills and the wise utilization of resources".

(*ii*) Practical Arts courses at the secondary level are offered only in the first year for a minimum of 600 minutes per week *i e.* for two hours each day.

(*iii*) Vocational education courses are required in the second, third, and fourth year, the time allotment being 900 minutes per week (3 units) in each year.

(*iv*) Training of skills in the high school especially for those who finish at the fourth year is matched directly and especially with the job and self-employment opportunities in the region. This is introduced to keep the young people from moving to the cities and becoming social liabilities and, therefore, inefficient citizens. However, in designing the curriculum from the first to the fourth year, practical alternatives are provided to equip the students with general skills which will enable them to be employed in occupations or trades in the same or other regions in the country.

(*v*) In the rural areas all high school students must have training in the essential elements of agricultural production and in the production of agricultural implements. These should constitute the main activities in the first and the second year and should be continued either as a specialization or a parallel occupation in the third and the fourth year, should another area be chosen by the student.

(*vi*) The academic and vocational subjects combined in a more or less 50-50 basis closely inter-related with one another should give any student aspiring for college education enough preparation for the National College Entrance Examination (NCEE), considering that the examination is not an achievement test but rather a scholastic aptitude test.

(*vii*) The centre of attention in the vocational portion of the curriculum in the third and fourth year should be on production and on means of earning a living. These, if done well, should enrich learning in the academic subjects and therefore help those who may want to go to college.

(*viii*) In order to carry out the scheme of vocational courses successfully it is envisaged that all secondary schools shall operate a placement and follow-up service that assists students, graduates, and drop-outs to obtain employment. These shall be the services of the guidance organization of the school.

Problem areas : Though a continuous effort is being made in Philippines to bring about a close relationship between formal education and training for employment, there are a number of problems which make it difficult to establish this relationship. These problems are as follows :

(*i*) Secondary education still remains primarily a college preparatory programme due to constraints in resources and the low status of vocational education.

(*ii*) Inadequate financial support for secondary school does not permit effective avocational and vocational instruction.

(*iii*) The planning and development of curricula are largely the work of professional educators and curriculum leaders with practically no involvement from the employment sector, the community and the students.

(*iv*) Vocational/Technical teachers are mainly school-oriented and lack the desired occupational proficiency to ensure high standards of attainment in vocational institutions.

(*v*) Guidance and counselling services are inadequate.

Innovative efforts are however being made to overcome some of these problems. For example, the in-school-out-of-school approach seems to lend itself adequately to to the utilization of community and home resources in the Practical Arts and Vocational Courses. Its adoption at the secondary school, wherever possible, is encouraged. The Diversified Cooperative Training programme (DCTP), as it is called, is to meet the training needs of pupils. In urban centres and rural communities where industrial, agricultural and other business establishments are available, vocational instruction may be complemented through a diversified cooperative training programme. This is a work-and-study arrangement which allows a student leader to divide his time between school and part-time paid job, spending approximately half his time in each. The in-school programme is made up of a combination of subjects required for high school graduation and subjects related to his job activities. Job time is devoted to performing task planned in advance by a written agreement between the school, represented by a coordinator, the parent and the employer. The DCTP makes use of the employing establishment as a school laboratory and the experienced employer or foreman becomes the on-the-job instructor. The coordinator assumes the multiple role of teacher, coordinator, and supervisor of school and work experience.

The DCT programme operates only in the third and fourth year. To determine whether DTCP may be undertaken, it is necessary for the school principal to ascertain student interest and also the availability of job training opportunities in the community. The programme meets the experimental needs of the students not provided in the school curiculum. In rural communities where there may not be enough business establishments which could serve as training stations, students may engage in home projects such as vegetable gardening, orchard work, poultry raising, piggery, fish pond, etc.

At the JASM High School which we visited we saw the integration of work and vocational skills into the high school academic curriculum which represented another way of dealing with the same problem.

Japan

Not much could be observed regarding vocational education in Japan. In fact, there is a different kind of emphasis in Japan and the main effort there is to humanise education. Japan is a highly industrialized country and, therefore, its problms are different from those other countries which still have largely an agricultural base. There are Technical Colleges (Koto-semmon-gakko) which offer a 5-year course in engineering or preparation for mercantile marine. Those who have completed the lower secondary school course or the equivalent may go on to a technical college. The courses are intended to provide a technician's standard of competence. Students who have completed a technical college course may apply for admission to the upper division of an undergraduate course at the University.

Republic of South Korea

In Korea there are different types of institutions which provide vocational education at different levels.

(*i*) *Vocational training centres* : The vocational Training Centres offer short-term programme of skill enducation to high school graduates to facilitate the development of skilled manpower. The programme offered comprises two courses—basic and advanced and it takes one year to complete the entire programme.

(*ii*) *Trade schools for out-of-school youngsters* : The vocational schools established in 1966 offer short term programmes of skill education to the out-of-school youngsters, so that they are properly equipped with skills necessary for earning their own living. These school are attached to the vocational schools. The curricula of trade schools were so organized as to fit the needs of the community of the region.

(*iii*) *Trade and higher trade schools* : The educational goal of trade and higher trade schools is prescribed by law as offering technical courses practically required for earning a living. The courses offered by these schools range from one year to three years. The trade school admits the graduates of primary and civic school, while the higher trade school admits those of middle school and the trade schools offering a three-year course.

Although these schools do not fall under the category of formal school setting, their courses are accredited by the Ministry of Education as that of middle school or high school so that the graduates of these schools may be qualified for the courses of formal education system at the respective level.

Thailand

Work education is a central feature of school education at the elementary and secondary level. After the Upper Secondary Stage a student can move on to vocational courses. There is provision of non-formal vocational institutes if a student drops out at the end of sixth or seventh grade. There are special courses in electronics, cookery, dressmaking, etc.

4. Educational Materials and Techniques

Great emphasis is being given to the improvement of educational techniques and the use of teaching-learning materials in all the countries we visited There is also a good deal of appreciation of the use of educational technology for the qualitative and quantitative improvement of education.

Philippines

One of the innovative techniques used in Philippines for providing low-cost but effective primay education through the optimum use of community resources is the "In-school-Off-School Appro ach (IS*OSA) The in-school portion of its name subsumes all the educative activities that are undertaken in the school within the framework of institutional practices, the "off-school" part involves those that are deinstitutionalized and are thus nonformal. The approach is partly deinstitutionalized and partly institutionalized since all non-formal activities of learners in the home or community are contiguous with in-school learning.

The curriculum materials to be prepared for this aproach are the self-learning kits for the learning tasks in each subject area. A self-learning kit(SLK) consists of a systematically sequenced material for learning specified skills or information, corresponding source materials, a list of community resources that may be utilized as well as reinforced, excercises which allow each learner to work at a rate, style and level suited to his capacities and learning modes. Since the SLK's are community-based they will invariably require the learner to seek varied specific resources in the community. This provides for active and functional learning by the child. It also gives training for self-learning and learning how to learn. The subjects that lend themselves best to purely off-school treament are social studies, work education and arts, music and physical education. The other subjects of the curriculum are better taught using the combination of in-school and off-school treatments.

Japan

Japan being a highly industrialized country can afford to make use of a variety of technological aids in education. A large number of schools make use of radio and television programmes, and a number of gadgets for classroom purposes like videotapes, projectors, filmstrips, etc. are used. In the Hojo Elementary School we visited, we were impressed by the use of a curriculum centre specially meant to provide teachers with all the resource material including lesson plans, audio-visual aids and other instructional materials available for a particular class in a particular subject at a particular time. It serves as a real service centre for the teachers of the school and economizes on their time and energy. In fact, it also has a research cell which continues to bring about improvements and add new material, for the use of teachers. The teacher is thus fed continually with useful material for classroom teaching.

The arrangement for the preparation and production of textbook in Japan is also worth mentioning. Curriculum development work is done at the national level by the Ministry of Education and text-books are developed and printed through private publishers. A number of good textbooks are therefore available in each subject area. It is important to note, however, that the textbooks thus produced must get their approval by the Ministry of Education before they can be used by schools. Supplementary reading materials are also prepared by the publishers and made use of by teachers and students

Great emphasis is laid on *enquiry approach* in teaching throughout the school stage Students are provided adequate facilities for self-study and use of instructional material like projectors, films, filmstrips, videotapes, etc.

Republic of South Korea

As has been mentioned above, a comprehensive project in education known as E.M project is currently under way in Korea. Many of the educational activities centre round this project. One of the major activities involved in this project is development of teaching-learning materials The teaching-learning materials in this project are developed to fit the characteristics of the general model of the instructional process and sub-models are continuously improved in terms of their relevancy and validity through try-outs on smaller and larger scales.

The teaching-learning materials include teacher's guide, students' learning guide and evaluation materials. The materials are supplemented by ITV and IR programmes.

Thailand

There is an Institute for the Promotion of Teaching Science and Technology (IPST), one of whose activities is to promote teaching-learning methodology for science and mathematics for secondary schools in Thailand. It comprises a number of design teams. By May 1971, Curriculum Design Teams were set up in chemistry, physics, biology and general science, and in August that year a planning committee for mathematics curriculum development was established. Each Design Committee produces a basic outline draft for curriculum, and after initial review, writing of trial textbooks and teacher's guide is undertaken These are then tested in trial schools for one to two years. Production of teaching equip neet by the Equipment Design and Production Team proceeds concurrently and engages itself in preparation of inexpensive equipments which can be developed locally. Revision and rewriting goes on continuously during school trials.

Science teaching methods have been emphasized by the Institute since its inception. Ways and means were sought to develop methodology suitable for Thai students. The new teaching methods are applied in the training of preservice and inservice teachers. Emphasis is placed on arousing the student's curiority, interest and enthusiasm as he progresses towards an intensive study of the subject matter.

An effort is being made to see that the textbooks are refined continuously by involving curriculum leaders, specialists, teachers and psychologists. Though textbooks are prepared at the national level the regional offices (twelve in number) can make necessary modifications in the light of local needs and environment This is aimed to bring about flexibliity and to take care of local imbalances. A programme of providing *supplementary readers* for all the grades of the primary and secondary levels is also on hand.

Publication of textbooks is done through Teacher's Council Association. Private publishers are also encouraged to bring out textbooks for approval of Ministry of Education.

5. Teacher Education for Effective Implementation of Curriculum

In the process of curriculum development the preparation of teachers is an essential ingredient. In all the countries we visited we found that there is a growing appreciation of the need for introducing new dimensions to teacher preparation programmes. Efforts are afoot to relate teacher education programmes to community needs

Philippines

Our visits to the University of the Philippines Normal Colleg Community Health Education Centre revealed that the training programme for the student-teacher involves living with the community and making community surveys to study the problems of the community. An action programme is prepared on the basis of the surveys and the student-teacher has to work with the community to solve some of the problems it is facing. There are special training centres which specially cater to the community health problems We visited Demonstration Centre in health education for elementary school teachers and other school personnel at the Philippines Normal College. The Health Education Association of Philippines (HEAP) is the cooperating agency which has given its full support to it. The Centre is dedicated to the education and training of teachers primarily to meet the needs of the Philippines school system. Besides offering graduate and undergraduate courees in health, the Centre provides practical training through various services such as Demonstration School Health Clinic and Health Education Laboratory and serves as a general consulting office in the field of school health education. The centre also serves the local community by inviting parents to various programmes of health education. The Health Education Centre has adopted a five-point programme of training, research, publication, health museum activities, and coordination work. It serves as the nucleus of all health education activities for the school and the community.

Japan

Besides the usual programmes of pre-service teacher education, there are arrangements for in-service education of teachers also. The emphasis laid on social education in Japan makes it necessary to train teachers in this field as well. We visited the National Training Institution of Social Education in Tokyo. This Institute was established in 1965 for the purpose of providing various kinds of in-service training courses for the officials incharge of social education. The duration of the courses is three to twelve weeks, and the average number of the participants is about 450 a year.

Republic of South Korea

Teacher education in Korea is viewed as one of the most important responsibilities of the government. Mention may be made of the incentives provided to teachers. The following are the important measures currently under implementation to boost the teacher's morale. First, the Korean Teachers' Mutual Fund was established on a national scale under the special legislation in order to improve teachers' welfare. This fund undertakes profit-yielding activities using the government subsidies and members' individual investment as capital. Profit accruing from these activities are exempted from tax and the government compensates for any financial deficit. They are used to provide asistance to retiring teachers particularly those in emergency cases, widows and orphans of deceased educators, and other welfare programmes of teachers. Secondly, "Master teacher" system was established in 1971 in order to provide greater opportunities for able teachers to play leadership role in teaching. In primary schools 23,866 teachers were appointed as "master teachers" in 1967, while in middle and high schools the numbers are 8,426 and 6,070 respectively.

Thailand

To assist in pre-service training of future teachers, invitations to attend meetings, workshops, and seminars and briefings on the IPST curriculum, teaching and evalution methodology have been extended to the administrators of the teacher training institutes and various universities. In addition, the IPST has also provided these institutes with the teaching equipment.

6. Curriculum Research and Evaluation

There is a growing realization among the developing countries that research in curriculum evaluation is the only way to evolve a meaningful and educationally sound curriculum Curriculum research institutes are being independently established to carry out a systematic programme of research in education in general and curriculum in particular A brief description of the research activities as observed by us in the four countries is given below .

Philippines

Curriculum research and evaluation practices are in-built in the process of curriculum development. In the preparation of text-books, the practice of trying out and experimenting with the newly-designed curricula is invariably followed. The National Research and Development Centre (NRDCTE) which we visited has a separate wing for the preparation of evaluation tools both for pupil assessment and evaluation of curricula. Research in curriculum evalution is also carried out by the University of the Philippines Science Education and Social Studies Centres.

Japan

The National Institute for Educational Research (NIER) which we visited is most outstanding research organization in Japan. Since its establishment in 1949, the Institute has carried out a number of projects on a nationwide scale. At present it has four research departments covering the various aspects of educational activity. For the application of research findings of the studies conducted by the Institute, publications in the form of research reports are brought out and distributed widely. Also through its External Service Department, assistance and suggestions are provided to school teachers, educational research institutes and educational authorties at both the national and local levels,

Republic of South Korea

The centre of educational research activity in Korea today is the Korean Educational Development Institute popularly known as KEDI The Elementary and Middle School Project (E-M Project) was a primary factor in the establishment of KEDI. The Institute is an independent and autonomous educational development institute founded for the purpose of undertaking comprehensive and systematic studies in educational goals, content, and methodology. These studies are oriented toward the development of a new educational system that will be responsive to national needs and provide for the solution of educational problems

KEDI has also established an educational broadcasting station to utilize the unique advantages of broadcasting media to help implement these educational reforms. The most important curriculum project which has been undertaken by KEDI is the Elementary and Middle School Development Project which aims at research for evolving a new educational system. From the beginning, KEDI formulated a set of goals for the project. They are :

(*i*) to bring about a significant increase in students' academic achievement with special emphasis on higher mental processes and on values, attitudes, skills and knowledge relevant to national development ;

(*ii*) to reduce the gaps in the quality of education among schools.

(*iii*) to achieve a higher cost-effectiveness of education;

(*iv*) to expand educational opportunities for children and adolescents , and

(v) to enhance the accountability of education to Korean public.

In order to achieve these goals and bring about changes envisaged in Korean Education, KEDI has developed a general system model of school teaching based upon recent research and modern theories of instruction. The model represents a process of instructional activity in school setting—Planning, Diagnosis, Teaching-learning, Extended learning, and Evaluation. Each of these steps has been elaborated into specific procedures and activities Another line of work from the initial stage of the project has been research on school curriculum. At the national level, important goals and objectives of education were idenfied through a series of national conferences. Meanwhile efforts have been made to specify current school curriculum All of these efforts have provided the basis on which the new educational system of KEDI was designed

The effects of the new system on pupil achievement and improvement of educational system as a whole is being regularly studied through a series of try-outs by KEDI.

We also visited another centre for research in Korea called Korean Institute for Research in Behavioural Sciences which was established in 1968 as an independent, autonomous, non-profit research organization directed towards the application of behavioural sciences to the solution of human and social problems It is also an educational institute which recruits and trains prospective researchers in behavioural sciences. It has several research divisions, *viz* , Division of Social Research and Development, Division of Learning Research and Development, Division of Test Research and Development, Division of Organization Research and Development, and Division of Child Research and Development.

Thailand

Research in curriculum in Thailand is mainly conducted at the IPST and the Curriculum Development Centre.

V SUGGESTIONS

In the last section of this report we have attempted to briefly record a few relevant ideas which have emerged from our study visits. We have particularly tried to study those factors which have resulted in or are contributing to effective change in the systems of education in different countries. Some of these ideas are mentioned below ·

(*i*) We find that in the final analysis it is the political will which ultimately results in quick and speedy change.

One outstanding feature in the educational system of Thailand is the responsibility of the Prime Minister's Office in matters of laying down general guidelines and policies for educational development. The office of the Prime Minister functions through two Commissions for this purpose. In India where education is not accorded such a high priority and hence the budget allocations are still inadequate in comparison with the four countries visited by the Team, there is a need to raise the status of education in the governmental set-up at the national as well as at the state level.

(*ii*) A socially relevant and personally useful curriculum has to be flexible, otherwise its relevance will be short-lived. In India with its diversity of languages, social customs and uneven economic development the needs and demands of people vary from one region to another. Our past experience has shown that decentralization and flexibility at times lead to chaotic conditions in the field of curriculum and textbooks and sometimes militate against national integration which continues to be a major concerns in India.

However, the argument that without decentralization and flexibility, conditions for experimentation cannot be created might not be easily dismissed In order to ensure effective and functional curriculum there is. a need in India for creating conditions for experimentation within the framework of generally acceptable principles.

(*iii*) In order that results of efforts towards change bring about some desirable results, it is necessary to continue with a curriculum once it has been accepted at the national level. Of course, there should be room for experimentation, but drastic changes too often and too quickly would militate against developing an effective curriculum for the country.

(*iv*) Reduction in study-time and content load has a special importance for India, especially in view of the fact that we have to cater for a variety of educational needs of the pupils. Japan is a good example for us to follow in this regard.

(*v*) That education has an important role to play in bringing about changes in the economic and social life of the people can well be seen in Korea where the Saemaul Movement has virtually changed the lives of the people in villages. It was an astounding experience for us to visit one Saemaul village and to see for ourselves how the standard of life of the village was radically transformed through a systematic programme of self-help, diligence and identification with movement It seemed to us that it was not so much the inputs but the Saemaul spirit which was at work in the upliftment of the economic and social standards of the people. It is for us to find out how we shall be able to inculcate this spirit in our villages In Korea this is achieved by the availability of strong government support and financial and technical assitance

(*vi*) Education in science and technology is receiving greater attention in all the four countries we visited. In order to make science teaching more effective and functional, institutes have been opened with the purpose of preparing inexpensive instructional materials out of local resources and indigenous material For instance, in Thailand with the assistance of the Institute for the Promotion of Teaching Science and Technology (IPST), it has been possible to prepare prototype instructional material. The equipment and materials prepared in the IPST are made available to schools through private manufacturing agencies.

(*vii*) Though availability of facilities of mass media and educational technology depends on national resources and the level of economic development of a country, there is no denying the fact that proper planning and consistent effort to put the available educational technology and mass media to the best use does enhance the effectiveness of educational programmes In the countries we visited radio and television are being effectively used for not only educating the teachers but also exposing the people in general to various new ideas in the field of education This helps in overcoming the resistance of the people to new ideas.

(*viii*) There is a need in India to encourage subject teachers' associations which could play an important role in the development of school curriculum.

It is also necessary to form a Curriculum Council of professional people in order to create a climate for effecting proper changes in the school curriculum.

VI. ACKNOWLEDGMENTS

It is difficult to end this report without expressing our sincere thanks to the ACEID for organizing for us an extremely useful and rewarding programme of study visits to four Asian countries. In each of the countries we visited our time was most fruitfully spent due to the excellent assistance and cooperation we received from those responsible for coordinating our programmes in their respective countries. We should like to place on record our sincere thank to Mr. Salustiano Faigao (Philippines), Dr K. Koizumi, (Japan), Mr. Dong-Ewi Kim (Republic of South Korea), and Miss Sesong Buasai (Thailand) for their sincere efforts to help us personally and professionally Though it is not possible to thank individually all those whom we met and with whom we held discussions, we must admit that but for their readiness and painstaking efforts to help us, it would not have been possible for us to make the best use of our time.

In the end, on my personal behalf, I would like to thank the members of my team whose excellent cooperation and support made our visits so enjoyable and useful. The present report is an evidence of their sincere effort to make it as worth while as possible

APPENDIX—I

Schedule of Work

I PHILIPPINES : Action Officer—Mr. Salustiano F. Faigao

Institutions Visited and the Programme of Work	*Date of visit*
1. *Visit to National Research and Development Centre for Teacher Education (NRDCTE), Department of Education and Culture, Arroceros, Manila* Orientation Conference on Curriculum Development at the (i) Elementary level, (ii) Secondary level, and (iii) Teacher Education. Briefing by Division staff followed by discussion.	5.12 77 (morning)
2. *Visit to the University of Philippines College of Education (UPCE), Diliman, Quezon City* Dialogue with Dean Paz Ramos and her staff. Discussion on Teacher Training for Community Education and also for the improvement of Science Teaching.	5 12 77 (afternoon)
3. *Visit to the University of Philippines Science Education Centre (UPSEC), Diliman, Quezon City. Manila* Dialogue with Director D. Hernandez and her staff. Discussion on the development of science and social studies textbooks at the national level, their preparation and dissemination.	6.12.77 (morning & afternoon)
4. *Visit to Phillppine Colleges of Arts and Trades (PCAT), Avala Avenue, Manila* Dialogue with President, Dr Jose R. Vergara and his staff. Discussion on the development of vocational curriculum for schools and the preparation of teachers for teaching vocational courses. Also observed PCAT Secondary School classes.	7 12 77 (morning & afternoon)

Institution visited and the Programme of work	*Date of Visit*
5. *Visit to Philippines Normal College (PNC) Taft Avenue, Manila.* Dialogue with Professor (Miss) Carmen Del Rosario, Director Community School Health Education Centre and her staff. Observed classes and community activities of the college. Discussion on the development of curriculum materials in Health Education and preparation of teachers and public health workers Also visited a Barangai to see how the health needs of the community were being met by the centre	8 12 77 (morning & afternoon)
6 *Visit to Jose Abad Santos Memorial School (JASM), Quezon City, Manila* Dialogue with Mrs Encarnacion San Pedro Manglicmot, JASMS Curriculum Coordinator, and the staff. Discussion on the "utilization of the environment in developing viable Life Science Curriculum"	9.12 77 (morning)
7. *Visit to Philippines National Agriculture School* Dialogue with the staff Discussion on the curriculum for Agriculture Schools and selection of pupils.	9 12 77 (morning)
8 *Visit to Malolos Marine Fisheries School* Dialogue with Miss Ester E. Coronel, Jr. College Instructor Discussion on the curriculum of the school and selection of pupils	9.12.77 (afternoon)
II. JAPAN Programme Coordinator—Dr K. Koizumi, Chief, NIER, Tokyo.	
1 *Visit to the Ministry of Education* Briefing by the Ministry of Education staff regarding educational reforms currently under way in Japan. Discussion on the goals and objectives of the new reforms in the school curriculum.	13.12 77 (morning)
2. *Visit to National Institute for Educational Research. 5-22 Shimomeguro. 6—Chome Megurc-Ku Tokyo* Briefing on NIER's activities by Mr T. Sasaoka and dialogue with Mr S. Himata and Mr T	13.12.77 (afternoon)

	Institution visited and the Programme of work	*Date of visit*
	Kanaya, Coordinator Research and Planning. Discussion on curriculum development activities in Japan and relevant research projects undertaken by the Institute	
3.	*Second visit to NIER* Discussion with the staff on various aspects of educational system in Japan and the role of different Ministries in the education of the Child	14.12 77 (morning)
4	*Visit to National Institute for Social Education (for the training of leaders in Social Education)* Dialogue with Mr J Yugami, Director. Discussion on the nature of training courses organized by the Centre and use of materials and techniques for training,	14 12 77 (afternoon)
5	*Visit to Hojo Elementary School* Meeting with the Principal. Observed many innovative features of the school aimed at the development of child's total personality with particular emphasis on the development of creative skills and the spirit of self-reliance	15.12.77 (morning & afternoon)
6.	*Visit to Hojo Municipal Curriculum Centre* Meeting with the staff of the Centre and observation of the audio-visual resource materials library.	15.12 77 (afternoon)
7.	*Visit to Daini Enzan Elementary School, Shinagawa* Meeting with Mr H. Tatara, Principal, and his staff. Observation of classes and study of the innovative features of the school	16 12 77 (morning)
8.	*Third visit to NIER* Individual visits to three research departments dealing with Teacher Education, Educational Psychology, and Science Education Discussions by the individual members of the team interested in the work of the three departments	17.12 77 (morning)

Institution visited and the Programme of Work.	*Date of Visit*
III REPUBLIC OF SOUTH KOREA : Programme Coordinator—Mr Dong—Ewi Kim, Chief Education Section, Korean National Commission.	
1. *Expert Meeting on the Comparative Study of Community Development at Unesco House (14 December—19 December, 1977)* Attended the last session and listened to the discussion on the adoption of final report presented by the Chairman, Prof. R.P. Dora.	19.12.77. (morning)
Visit to Korean National Commission for Cooperation with Unesco, Lunch with the Secretary General. Dr Kyu-Taik Kim and discussion on Korean Education	19.12 77 (afternoon)
3. *Visit to Unesco Youth Centre* Learnt about the activities of the Centre particularly related to the training of University students for the promotion of community leadership.	20 12.77 (morning)
4 *Visit to Korean Educational Development Institute (KEDI)* Viewing of film on current status of KEDI and brief orientation to its activities.	20.12 77 (afternoon)
5. *Second visit to KEDI.* Dialogue with the Curriculum Research staff. Discussion centred round the Saemaul Education Movement and the Elementary and Middle School Development Project Many innovative features regarding the preparation and use of instructional materials and making Education relevant to national development goals were observed.	21.12.77. (morning & afternoon)
6 *Visit to Yongla Saemaul Village* Observed the Saemaul spirit permeating every aspect of the life of the rural community and bringing about remarkable changes and improvements in the lives of the people.	22.12.77. (afternoon)

Institutions visited and the Programme of Work.	*Date of visit*
7. *Visit to Educational Research Institute, College of Education, Seoul National University.* Meeting with Prof. Bom Mo Chung. Discussion on relevant research studies undertaken by the Institute.	23 12.77 (morning)
8. *Visit to Korean Institute for Research in Behavioural Sciences.* Meeting with Dr. Sang Ho Kim, Deputy Director. Briefing on the activities of the Centre.	23 12 77 (after noon)
IV. THAILAND : Programme Coordinator — Miss Somsong Buasai, Curriculum Officer, National Curriculum Development Centre, Department of Educational Techniques.	
1. *Visit to Curriculum Development Centre.* Dialogue with the staff. Discussion on the changes being introduced in the structure and content of school education.	27.12.77 (morning)
2 *Visit to Textbook Development Centre.* Dialogue with Mrs Vanli Prasarttong-Osoth, Director of Educational Materials Development Centre, Discussion on the preparation and production of textbook and supplementary readers.	27.12 77 (afternoon)
3 *Visit to the Institute for the Promotion of Teaching Sciences and Technology (IPST).* Visited the Chemistry and Physics sections and discussed various problems relating to the development of science curricula.	28.12 77 (morning)
4. *Visit to the Educational Innovation Design Team at the IPST.* Observed the graphic unit, photographic unit, video-tape unit and Audio Unit. Discussion on the utilization of the materials by schools.	28.12.77 (afternoon)
5. *Visit to the Darakaran Elementary School* Dialogue with the Principal Studied the non-graded experiment and observed the different	29 12.77 (morning)

Institutions visited and the Programme of Work	*Date of visit*
activities which are part of the school curriculum and are intended to develop useful skills and attitudes among pupils.	
6 *Visit to Centre for Educational Technology, Ministry of Education* Dialogue with Miss Napa Bhongbhibhat, Director. Discussion on the activities of the Centre which aims at providing support materials for the better use of the school curriculum.	29 12 77 (afternoon)
Phase II : *Planning Workshop at the Unesco Regional Office. Bangkok*	30.12 77 3.1.78 4.1.78

APPENDIX II

Brief descriptions of some of the Innovative Projects in the four countries visited by the team

Philippines

1. Utilization of the Environment in Developing Viable Life Science Curricula.
2. Community-Based Teaching Programme for Community Health
3. Integrating Work and Vocational Skills into a High School Academic Curriculum JASMS—A Learner-Oriented Design.

Japan

4. Hojo Elementary School

Republic of Korea

5. The Elementary-Middle School Development Project (E-M Project)
6. Saemaul Education Movement

Thailand

7. Institute for the Promotion of Teaching Science and Technology.

1 TITLE · Utilization of the Environment in Developing Viable Life Science Curricula

Philippines

Background

The problems or situations motivating this project were · (a) paucity of materials for classroom use ; (b) limited experience of many teachers with respect to inquiry and discovery approaches , (c) too little laboratory work in classroom ; (d) subjects taught are divorced from concrete life experiences of the child ; (e) need for ecological awareness in the use and care of the environment

The Science Curriculum Improvement Study on Life Science dates back to 1970. The farm, as an environmental laboratory, and the development of other projects started in 1961 It was found that verbal emphasis in most science curricula and the paper pencil means of evaluation did not create an atmosphere that encourage firsthand experiences with the *natural environment* Furthermore, it is difficult to keep alive specimens in classrooms, especially when teachers are not trained for guiding such an activity.

Objectives

The major purposes of the project were ·

1. To effect a greater involvement among children, as well as the teachers in the development of scientific concepts derived from realistic situations
2. It is the intent of this project to foster an awareness and understanding of the environment and to use it well and wisely.

The target population consisted of the school children and teachers of Jose Abad Santos Memorial School

Implementation

The preparatory measures taken before making the project operational were . (a) making the children aware of their natural environment ; (b) consultations with Dr Chester Lawson of the Science Curriculum Improvement Study , (c) securing experimental materials from New Biology studies abroad ; (d) getting the teachers interested in the project ; (e) live-in workshops at U P. Los Banos ; (f) enlisting volunteer help from resource persons ; (g) conference on scientific activities ; (h) adoption of the SCIS concepts with modifications to suit particular conditions

The project has been in operation for the past five years This started as a small-scale project The Science Programme of both elementary and high schools rely heavily on the natural environment Thus, what at first was a mere exploration became an urge to do something about what was explored The hectare of land owned by the school which was covered mainly with "talahib" was turned into an integrated farm which produced fish, poultry, eggs, rice, vegetables and fruits This was done by the teachers and their students Now, the JASMS Farm gives laboratory facilities to make science curriculum in the elementary and secondary levels more viable

The general plan of action used in the implementation of the project was to afford greater autonomy to teachers in the classroom in terms of flexible work schedules, systematic planning, and interesting activities in and out of the classroom. The teachers were given on-the-job training in the use of the "situational approach". The classrooms became workrooms with materials conveniently and strategically located The process of inquiry and discovery was encouraged among the students Among the specific strategies and techniques used were free play, film and slides viewing, handling of specimens, purposeful exploration, recording of observations and formulating sound conclusions

The activities that are envisaged or planned for implementation are · (a) independent student work on food production ; (b) use of high school students to help in the preparation of elementary school projects ; (c) compilation of a list of concrete activities designed to develop science concepts , (d) extension work

Inputs

The facilities available to the project were . (a) one hectare of land in Quezon City ; (b) 280 sq.m ground water pond ; (c) fish stock (carp and bangus) ; (d) Central housing for 400 broilers, and incubators ; (e) housing for 80 laying hens ; (f) garden house with laboratory ; (g hand tractor, and a water pump ; (h) library and sample materials for science teaching ; (i) projector, slides, typewriters, calculator, and work sheets ; (j) pigeons, rabbits, acquaria and herbaria.

The senior staff members of the project consisted of the school director, science committee chairman, two farm managers, and one finance officer.

Expenses incurred were (a) £ 2,000 for salaries of teachers ; and (b) £ 8,000 for facilities. Other expenses came from (a) student co-operative, (b) producers co-operatives, (c) contribution from parents

The director is incharge of the overall administration of the project Under him are the consultants, a finance officer, the farm manager. and the science committee who assist him in the implementation of the project.

Key Innovative Features

Some of the key features worthwhile adapting are :

1 Co-operative school planning for the utilization of the environment as a learning laboratory.
2 Flexible scheduling.
3. Greater autonomy for teachers in terms of planning and decision-making.
4. Provision of concrete learning experiences.
5. Teacher-made instructional units in Science
6 Evaluation, systematized and based upon actual performance.
7. Integration of learning experiences in the school and out-of-school.

Source · "Inventory of Educational Innovations", Department of Education and Culture, National Research and Development Centre for Teacher Education, Manila, Philippines.

Contact Person : Doreen B Gamboa
Director
Jose Abad Santos Memorial School
E De los Santos Ave , Quezon City

2 TITLE . Community-Based Teaching Programme for Community Health

Philippines

Background

The Comprehensive Community Health Programme (CCHP) in under the University of the Philippines system Established in 1976 by Dr Paulo Campos with financial assistance from the Rockefeller Foundation of the CCHP was an answer to the commitment of the University to programmes that are community-based aimed at helping both the community and the students of the University as well ·

Objectives

The primary aim of the CCHP is to find out how to deliver health care to a community efficiently within the available local resources taking into consideration the Socio-economic and cultural constraints within the community.

There are three objectives of the CCHP within this primary aim ·

1 Research—To determine the factors that effect the delivery of health care to a community, whether urban or rural, and relate these to the greater part of the country

2 Services— To extend actual services to typical areas, both urban and rural. to serve as models

3 Training —To train health workers, both professional and non-professional, who will be functional in such a model health care delivery system

Implementation

The three objectives mentioned above are being attained according to the following principles and philosophies :

a) Health care is best delivered through multi-disciplinary group working on the basis of "team-work"

b) Community participation must be cultivated and sustained in the delivery of health care,

c) Emphasis should be given to discuss prevention of disease and health promotion consistent with a total and comprehensive health care.

d) Local resources must be utilized, especially the existing health units of the Department of Health and other government agencies and the indigenous health workers

The model for the health care delivery system is based on the levels of health care determined primarily by the size of the population and its geographic distribution, and the number of health workers. Thus, there are six basic levels : home level; barrio level, municipal level, district level, provincial level, regional, and national levels

In all the levels of health care the different basic health services are provided for a total and comprehensive coverage. These are . medical care, environment health. communicable diseases control, maternal and child health including family planning and nutrition, dental health, pharmaceutical services, nursing services, health education, control of chronic diseases and mental and rehabilitation social services, and vital statistics.

The CCHP also conducts researches on the different problems involved in the delivery of health care. Some of the on-going researches are

i) A study of a new health care system that would be feasible and effective within the context of the socio-econmic conditions of the country

ii) A study of integrated approach to maternal and child health, family planning and nutrition problemes in Bay and Victoria, Laguna

iii) An evaluation of the CCHP Multi-purpose Health Worker Training, Pilot Training and Mother's Classes Training programme,

iv) A study of a more effective and economic system of drug distribution and dispensation for rural communities in the Philippines

v) A proposed dental health care Programme for Bay Community, Laguna

Training programmes have also been set up, both for the professional and non-professional levels. In the professional level, graduates and undergraduate students such as the U P College of Modicine fourth year medical students undergo several months of training at the CCHP The concept of teamwork is insisted on in training, e g the veterinary students work hand-in-hand with the nursing and community development students in the barrios. Training programme is progressively developed to include beginning years Examples of this are the College of Medicine's Volunteer Programme for the first year students and the College of Agriculture's Social Orientation Class in the first year for students who are sent to the CCHP for training.

In the non-professional level, the CCHP provides for the training of multipurpose health workers, single-skilled workers and other auxiliaries within their respective fields The multipurpose health workers are taught about simple medical and nursing care by the doctor and the nurse; environmental sanitation, health education and record keeping by the B X public health graduate; common pharmaceutical terms by the pharmacist, and community organisation by the social work and community development instructors On-going classes are being conducted by the CCHP for mothers, adult illiterates, "hilots", dental aides, pharmacy aides, laboratory aides, and school teachers.

It is planned to establish a closer co-ordination with the different units of the University of the Philippines and make them more actively involved in trying to develop more effective strategies, organisations, etc for teaching community-health during field work rotation.

Inputs

The project operates on a yearly budget of P200,000 00 for the salaries of personnal and P20 000.00 for maintenance of operating expenses Funds for all these come from the University of the Philippines

Under the direction of the President of the University of the Philippines with the advice of an Advisory Council and the members of the Comprehensive Community Health Service Board, the Director of the CCHP manages the whole project He is assisted by three deputy directors, one for training and research, the other for urban division and the third is for rural division.

The Developmeut Academy of the Philippines (DAP) is presently conducting an evaluation of the project

Key Innovative Features

1 The CCHP follows a unified community programme concept where the community is the centre of care, the family is the basic unit of care, and the approach is comprehensive in coverage and multidisciplinary in nature
2 The idea of extra-mural teaching of community health.
3 Training and utilization of paramedical health workers in order that they will be able to assist the population to reach and maintain standards of health and living conditions comparable to that of developed countries
4 Providing new work opportunities for the members of the community.
5 Strengthening the confidence of the members of the community in the government and the health services provided them.

Source . "Inventory of Educational Innovations," Department of Education and Culture, National Research and Development Centre for Teacher Education, Manila, Philippines.

Contact Person · Dr. Sergio S. Gasmen
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University of the Philippines
Bay, Laguna
Philippines

3 TITLE : Integrating Work and Vocational Skills into A High School Academic Curriculum, JASMS-A Learner-Oriented Design Philippines

Background

Secondary education was deemed by the project proponents as being disoriented with social realities and inconsistent with the needs and interests of students, thus often disenchanting to adolescent youth. The project in search for relevance in secondary education, was started in 1961. It represents a deviation from conventional school organization and management, inflexible curriculum structures, formalistic administration, stereotyped and uniform instructional procedures, rigid time allotments, and other traditional elements of the subject-centered set up In other words, the project is learner-oriented which places emphasis on the felt needs and immediate interests of individual students

With feedback from former students who had gone to colleges, reports of Commissions to survey Philippines education and consensus of beliefs on the nature of human growth and development, a tentative plan for a new type of high school was designed, one which would meet the needs of and offer a promise to young people with a high potential for academic excellence to achieve an ever increasing intellectual power and, at the same time, afford those with limited mental ability acceptable outlets for their own particular strength, and where all would acquire a sense of their own worth in society.

Objectives

Institutional in scope, the project is a local adoption of an experimental high school which has continuously been improved since its inception in 1961. Its curriculum has been recently reinforced through reforms introduced by the Department of Education and Culture, such as YDT programmes, YCAP activities, sports development, etc In general, the objectives of the project are :

1 To quickly bridge the gap between the needs and aspirations of students and the demands of the nation's development
2 To discover effective means of involving students and teachers in constructive response to social events and changes.
3 To discover what is feasible in response to needed educational reforms within a given population

Specifically, the project seeks to :

1. Draw curricular content from contemporary problems, issues, events, and changes.
2 Provide opportunities for self-initiated and voluntary work experience in and out of school time
3. Test and carry out ideas in concrete forms.
4. Create conditions for work and study that permit freedom of choice in selecting curricular activities.
5. Evaluate results in terms of the set goals of students

Implementation

The inclusion of work experience in the academic curriculum was originally conceived by Mrs. Patnaik, an Indian educator, who foresaw the feasibility of developing an idle, one-hectare plot near the school. A programme of studies in Science, History, and Literature was evovled and integrated with Agriculture Starting with only 21 students in 1961, the project had 200 students enrolled at the time of this national survey in four work-oriented curricular offerings, namely · Agriculture (rice production), poultry raising, fishpond culture, plant propogation), Business (typing, stenography, book-keeping), Crafts (cooking, dressmaking, tailoring, canteen service), and Photography These vocational courses have been integrated with academic subjects to cover four years.

The project aims to carry on and improve the working atmosphere and interpersonal relationships through personalized instruction, co-operative projects, and mutual sharing to foster a continuing development of self-disciplined, well-socialized young people who are imbued with desirable attitudes towards work and possessed with demonstrable capacity to use freedom wisely and profitably The project also envisages preparation of filmstrips and tapes on the philosophy and practices at work.

Inputs

Facilities provided by the school consist of a one hectare farm, typewriters, musical instruments, art room and materials, photographic laboralory, hand tractor and farm implements, student-operated canteen, sports equipment, laboratory co-operatives, library and materials instruction centre, and faculty development programmes. Financial support amounting to £ 100,000 00 is borne by the Philippine Women's University. Nevertheless the project is self-supporting through tuition fees, earnings from various co-operative projects, and free services from consultant and parents

The project is managed by a full-time project director (Mrs. Doreen B Gamboa) with Miss Encarnacion San Pedro as Chairman who directly administers the High school and exercises immediate supervision and coordination over the activities of the farm manager, the adviser of the school's co-operatives (Producers and Consumers Coops), and members of the instructional staff

Performance and Impact

The respondent claims that all graduates of the JASMS for the last two years are either studying in college or are gainfully employed. One student, without diploma due to fixed graduation requirements, is now a well-known dress designer All these have won competitive university scholarships. The school farm produces annually 14—22 cavans of palay, 1—2 hundred kilos of bangos and carps, 2,000 broilers, 9,000 eggs, and several hundred kilos of fruit and vegetables.

Key Innovative Features

1. Flexible programming of activities.
2. Student involvement in planning, implementing and assessing work and study.

3 Personalized instruction and volunteer service from the community
4 Informal working relationships among administrators, instructors and students
5. Utilization of local materials and conditions as resource materials for teaching
6 Modification of rigid curricular requirements and instructional procedures through feedback from the guidance sources.

Source. "Inventory of Educational Innovations", Department of Education and Culture, National Research and Development Centre for Teacher Education, Manila, Philippines.

Contact Person · Mrs Doren B Gamboa, Director and
Miss Encarnacion San Pedro, Chairman
Jose Abad Santos Memorial School
E. do los Santos Avenue, Quezon City
(The school is an affiliate of PWU)

4. TITLE : **Hojo Elementary School**
Japan

The Hojo Elementary School is a public school which was established in 1873 by the Tatoyama City Board of Education, Chiba Prefecture, Japan. It is a special pilot school which uses up-to-date teaching materials, techniques and equipment It has 41 classes including two special classes and four speech classes. It has a total enrolment of 1,425 pupils.

The staff is composed of 44 persons including clerical personnel

The school has four buildings with 48 rooms, two science laboratories, two music laboratories, a library, a swimming pool and a spacious playground. Other facilities of the school are

a) Equipment for large-group teaching system ; closed-circuit television ;
b) Equipment for the study of the teaching-learning process response analyzer, observation room with monitor T.V. tape recorder, VTR, etc , and
c) Equipment for self-learning

As a pilot public elementary school, the Hojo Elementary school aims not only at providing 6 years compulsory primary education but also at applying new methods of teaching and learning The main features of its programme are ·

a) Systematization of teaching plans and materials through the establishment of a Curriculum Management Centre with the following main functions
   i) To help the teachers to develop teaching plans to be applied in the schools ;
   ii) To promote exchange of information and ideas among the teachers of various grades through an information bulletin published twice a week ;
   iii) To promote contact between the school and parents by publi-

shing one newsletter for each grade;

    - iv) To provide the teachers with up-to-date teaching materials ; and
    - v) To assist teachers in team-teaching programme
- b) Improvement of teaching methods
    - i) Application of the child-centred method of teaching for the teaching of arithmetic in grade 1. The teacher gives some guidance to the pupils and lets them discover and learn by themselves
    - ii) Application of team-teaching in social studies A close-circuit television is used as a means of teaching the lessons.
    - iii) Use of new technology such as T.V , headphones, response analyser etc. in teaching music in grade V
    - iv) Provision of a speech clinic to improve the speech of the pupils with speech defects.

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Japan.

5 TITLE . The Elementary-Middle School Development Project (Em Project

South Korea

Background

Korean education is confronted with a host of problems which arise from rapid increase in enrolment in the primary and middle schools accompanying population growth coupled with the elimination of the middle school entrance examination ; inadequacy of the conventional modes of instruction and learning , wide variations in educational quality , and the lack of relevance and reality in the curriculum.

The urgency to cope with these increasingly complex problems clearly indicated the need for an institute which is exclusively concerned with consistent and intensive research and development tasks in Korean education.

Pursuant to the Korean government's request a survey team from Florida State University conducted a systems analysis of Korean education and came up with a recommendation for developing an alternative system for primary and middle schools.

This recommendation was subsequently followed by the granting of a development loan of 7,500,000 dollars earmarked for the establishment of KEDI which would undertake the educational research and development project. The project also includes demonstration and diffusion of the new educational system.

The proposal for the loan was passed by the National Assembly on July 31, 1972, and the Minister of Education and KEDI Board of Directors formally approved the establishment of KEDI on August 30, 1972

The EM Project was the direct motive for the establishment of KEDI This project has been scheduled for intensive implementation from 1973 through 1977. The year 1975, the third one since the launching of the project, will see the most vigorous activities in the development of instructional and management systems, instructional materials, and educational broadcasting systems.

The project is designed to introduce a more efficient and higher quality educational programme into elementary and middle school in Korea

The educational development project is of such a magnitude as to require intensive systematic efforts in respect of all facets of education Therefore efforts are continuously being made to reflect the field experiences of teachers as well as the expertise of professionals.

Objectives

Intrinsic Goals of the EM Project The intrinsic goals describe the experiences pupils should be having when the new educational procedures have been developed to their maximum effectiveness Therefore, these goals will serve both as the criterion in a field testing, revising, and other development activities. Six intrinsic goals of the E-M Project have been identified :

i) Individual students are provided with more learning experiences with special emphasis on the development of higher mental processes such as problem solving, critical thinking, and creative production.

ii) Individual students are provided with more learning experiences for better internalization and acquisition of values and attitudes, productive skills and knowledge that are uniquely needed for national development.

iii) Learning progress of individual students are periodically monitored, and the results are to be fed back into the teaching-learning processes

iv) Individual students have more opportunities for self-directed learning.

v) A variety of learning resources through supplementary instructional materials and media are available for achievement of major instructional objectives

vi) Individual students have access to a variety of learning resources and measures such as supplementary and enrichment programmes, and flexible classroom organization adapted for individual differences in the learning rate.

Having identified these intrinsic goals does not necessarily mean that they remain entirely static Experiences and insight gained in the process of programme development may lead to some modification in the statement of certain goals or to the identification of some important new goals

Pay-Off Goals Pay-off goals are, in the context of the EM Project, long term effects or out come of the new educational system when it is fully implemented in the school nationally. They also provide ultimate criteria by which the system designs and their effectiveness are evaluated Five pay-off goals have been identified.

i) High achievement tendency (a significant increase in the student mastery rate) is observed among students.

ii) Higher cost-effectiveness is attained.

iii) Regional gaps in the quality of education and school differences are reduced

iv) Educational opportunities are expanded for more children and adolescents

v) The sense of accountability and credibility of the general public in relation to school education is enhanced

Scope of the project

A *Development of a New Educational System and Its Demonstration*

The EM project, which is to develop a new educational system for the primary and middle schools, is markedly different from the conventional, patchwork type of reform programmes witnessed in the past in the sense that the former is characteristic of a full circle of more intensive research-development-demonstration activities Such an intensive and consistent effort in educational reform is more likely to lead to the development of a more viable and dynamic educational system. In this sense, the project is an integrated and concerted effort to mobilize every available resource for developing a new and better educational system

B *Development and Partial Demonstration of an Instructional System Model for the Primary and Middle Schools (1973-1975)* :

In order to explore a viable solution, mechanism for such problems as low level student achievement and financial constraints, efforts are being made to develop a new instructional system that would provide a higher quality of education at a lower cost To illustrate this, studies were made in depth of the important variables influencing the instructional system such as instructional process, media learning experiences, student grouping, and staffing structure The studies defined positive and negative sides of the existing instructional system yielding valuable input for its improvement. The appropriate learning pattern and instructional principles that would enhance learning outcomes were identified, and the multiple learning instructional materials developed. The new model developed through this procedure will be applied to actual classroom situations and continuously evaluated in terms of its effectiveness.

Demonstrations of the new model were scheduled as follows .

The first demonstration : Two subjects of 3rd and 5th grades each (1973)
The second demonstration : Three subjects of 2nd grade, (1973)

The third demonstration : All subjects of 3rd grade (1974)

The fourth demonstration : All subjects of 3rd and 5th grades (1975)

C *Development of the School Management System Model and Its Demonstration.*

Effort is being made to develop a school management system model that will maximize administrative efficiency and learning results to be integrated with the new instructional system to form a general educational system Studies are conducted on the facilities, financial status, organizational structure, and supervision practices in order to (a) identify the inefficiency and drawbacks of the existing management system and develop alternatives to it, and (b) to develop an effective school management system model that is workable in an indigenous setting

The new model will be applied to actual classroom situation, evaluated in terms of its effectiveness, and continuously modified in preparation for final application on a much larger scale

D. *Evaluation of the Educational System*

The effectiveness of the new educational system will be carefully evaluated through a feedback mechanism The evaluated results will become valuable data in further efforts to improve the system. Comprehensive studies on the validity cost-effectiveness, and direct and indirect results of the new system will be conducted to (a) develop an evaluation model to verify its effectiveness resulting from the new model, (b) develop an evaluation system that will effectively help the researchers in their evaluation activities.

E. Comprehensive Demonstration and Evaluation

The new educational system is tried out in the first instance in 45 primary and middle schools which have been selected for demonstration purposes These schools take a leading role in the educational reform programme. The demonstration includes the instructional system, management system, media and instructional/learning materials that will continuously be modified and refined to be available for nationwide application in the primary and middle schools after 1978. The demonstrations of new models have been scheduled as follows ·

The first demonstration . 15 schools involved; all subjects of 3rd and 5th grades (Sept. 1975—Feb 1976.)

The second demonstration · 30 schools involved; all subjects of 1st through 6th grades (March 1976—Feb 1977).

The third demonstration : 45 schools involved; all subjects of 1st through 6th grades and six subjects of 7th through 10th grades (March 1977—Feb. 1978)

F. *Studies on Curriculum and Development of Instructional Materials*

The contents to be included in the new educational system become the curriculum which specifies instructional goals and content structure The question, "what should be taught ? " can be equated with the philosophical question, "what type of person should be produced ?" Hence, it is essential that the curriculum reflects the educational ideals and demands of the society.

However, it has been noticed that the existing curriculum prepared within the framework set by the Government, is so vague as to cause confusion in interpreting educational goals

In co-ordination with the Textbook Compilation Bureau of the Ministry of Education, the entire curriculum of the primary-middle schools will be specified in terms of goals, content structure, instructional design, and supporting materials, followed by the testing of their effectiveness. Reference materials will be developed simultaneously which facilitate compilation of text books.

Multi-instructional materials, including teacher's guides, work-books, TV/radio programmes, and evaluation materials will be developed and tested to verify their effectiveness Development of these materials has been scheduled as follows :

The first development : All subjects of the 3rd and 5th grades (1974)
The second development : All subjects of the 1st, 2nd, 4th, and 6th grades (1975)
The third development : Six subjects of 7th through 9th grades.

G Basic studies on curriculum

Basic studies on curriculum applying advanced theories of learning, curriculum, and evaluation, are being conducted These studies included the problems related to curriculum integrity, latent curriculum education objectives, knowledge structure, and so on. The results of these studies will be reflected in developing the new intructional system and its materials.

H. *Studies on the diffusion process* (*1973—1977*)

Studies on the process of diffusion of educational innovations are being conducted to develop an effective mechanism for introducing the innovative programmes in the schools.

These studies include case studies of educational reform from within and without accompanied by information services to the school, the educational reform process covering initiation, diffusion, and institutionalization of reformed programmes, and the factors that hinder or facilitate the introduction of educational reforms. The outcome of these studies will determine the basic strategy for the nationwide diffusion of the reformed system after 1978.

National Institute of E
Library & Documen
Unit (N C E R

Implementation. (September 1972 through June 1975)

Designing New Instructional Model

The designing of a new instructional system model is the initial step in a series of system development studies. The newly developed instructional model is unique in that it takes account of individual differences in students with emphasis on individualized guidance. In the new models the instructional process was divided into five parts, planning-diagnosis-guidance-development-evaluation. Its first, second, third, and fourth try-outs in the field provided satisfactory results.

The first try-out.
Period : May 28 through June 23, 1973
Schools involved : 4 classes at Kesung Primary School, Seoul
8 classes at Susong Primary School, Seoul
Grade : 3rd and 5th
Subjects involved Mathematics and Natural sciences
The second try-out
Period : November 5 through December, 1973
Schools involved : 10 classes at Hwage Primary School, Seoul
4 classes at Dongbuk Primary School, Seoul
7 classes at Buhung Primary School Seoul
Grade : 2nd
Subjects involved : Moral education, Mathematics, and Korean language.

The third try-out
Period : October—November, 1974,
Schools involved : 7 classes at Hanam Primary Schools, Seoul.
4 classes at Onju Primary School, Seoul
Grade : 3rd
Subjects involved all eight subjects

The fourth try-out
Period : May 5 through 28 June, 1975
Schools involved : 4 classes at Hanam Primary School, Seoul
8 classes at Shu Primary School, Ahnyang
Grade : 5th
Subjects involved : all nine subjects

Consistent findings from these try-outs are : (i) students' average achievement level is very much higher under the new system; (*ii*) practical difficulties were identified which the teachers had to face in giving remedial, supplementry and enrichment instruction at the end of the diagnosis and formative tests; and (*iii*) contents included in materials such as TI, and work-books tended to be too heavy for the given time.

Selection of Demonstration Schools (March 1974)

As a preliminary step towards nationwide, comprehensive try-out of the new educational system scheduled for September, 1975, 60 schools were tentatively selected as follows :

Schools	*Major cities*	*Small cities*	*Rural areas*	*Remote areas*	*Total*
Primary	6	11	22	3	42
Middle	3	5	9	1	18
Total	9	16	31	4	60

Study on the Managerial Practices of the Demonstration School (May—August 1974)

A study was made of the managerial practices in the demostration schools to gain some insight into them and provide suggestions for developing a new school management system At the same time this study investigated these school in terms of their appropriateness for try-out A report on the managerial practices of these schools was published

Specification of the Elementary School Curriculum (January—December 1973)

As a preliminary step toward specifying the primary school curriculum KEDI developed a framework serving as a guideline for specifying the curriculum. Objectives tables, content tables, specification tables, unit guide plans, and textbook analysis tables were developed. This study involved curriculum specialists, subject specialists, and teachers

Experimental Study on the Revised Textbooks (February, 1973—February, 1974)

The new textbooks, revised during the period from 1972 to 1973, were put into use in the field to identify problems and to consider measures for improving instructional guides. Based on the identified problems, modifications and supplements were made. All subject of the 4th, 5th and 6th grades were tried out in the process

Specification of the Middle School Curriculum (January—September, 1974)

This study covered mathematics, natural science and English language in the middle schools The methods adopted in the study were the same as those for the primary schools.

The Types of Instructional Materials for the New Instructional System :

The new instructional system requires active participation by the students and utilization of a variety of instructional materials catering to individual needs.

Therefore, the first task was to determine the types of the instructional materials which should be in the new educational system To meet these instructional characteristics, the following materials have been selected for development

Instructional guides
Workbooks
Broadcasting media : ITV and IR programmes
Evaluation materials . Diagnostic, formative and summative evaluation
Instructional media : Audio-visual.

Key features of the project

The EM Project is not just another kind of experiment to be tested for its effectiveness. This, of course, does not imply that the EM Project is not to be tested rigorously for its effectiveness and validity In fact the EM Project is essentially an implementation programme of planned reform and that its effectiveness and validity ought to be improved continuously through formative evaluation and quality control

The EM Project should be viewed as part of a national educational reform programme, where the total systems approach is applied. Expertise from various professional fields ranging from educational philosophy to intructional science and technology should be used appropriately. Since educational reform is an integral part of the total social reform programmes Inter-disciplinary exchange of views and knowledge is also an essential process from inception to development and evaluation of the EM Project.

Source : "Final Report of National Inventory of Educational Innovation", Korean Educational Development Institute, Seoul Korea.

Contact Institute : Korean Educational Development Institute (KEDI)
8—20, Yejang-done, Joong ku Seoul, Korea.

6. TITLE : Seamaul Education Movement South Korea

Background

In the developmental decade of 1960s, priority in Korea's national developmental goals was given to industrialization In the second developmental decade of 1970s more balanced weight has been given to both industrialization and agricultural development and, in addition, what is called the spiritual revolution has been greatly emphasized The Saemaul Movement literally denoting the New Community (or Village) Movement originally proposed by President Park Chung Hee in 1970, is a concrete materialization of these stages in national development goals, and the Saemaul Education is its educational aspect

Objectives

The Saemaul Education broadly aims at improving social relevancy of education by way of relating education to society, socializing the school on the one hand and educationalizing the society on the other More specifically, the objectives are (i) to tailor the curriculum to community needs; (ii) to foster the Saemaul spirit of diligence, self-reliance and co-operation among students and the community people; (iii) to provide community service for students and productive adult education programmes for the community people, (iv) to develop demonstration projects in school aiming at increase of production and earnings for the community people, and (v) to make the school serve as a cultural centre of the community.

Implementation

The implementation of the Saemaul Movement and Saemaul Education is typically characteristic of an ingenious combination of centralized provisions for policies, guidelines and support on the one hand and decentralized education on the other. The latter includes a combination of central support and local programme selection and implementation with local leadership and initiative It combines efficiency with democracy, sense of direction with a large degree of flexibility and creativity, government support and local initiative In the case of Saemaul Movement, progressive improvement of the basic village to self-relying village and finally to self-supporting village has been brought forth and more recently it has been expanded to the urban area. As for the Saemaul Education programmes, 158 schools have opted to provide more intensive adult education programmes, each school being called the Standing Saemaul School, while every elementary or secondary school is now providing modest adult education programmes called the Standing Saemaul Class. It has now become a nation-wide phenomenon.

Problems and issues

Although the overall direction of the Movement has been generally accepted some problems remain to be solved In the case of Saemaul Movement, the lack of effective local leadership in some communities may be the greatest problem; in the case of Saemaul Education, teacher apathy due to heavy workload may be a handicap

Impact

The impact of Saemaul Movement has been considerable, bringing forth visible changes in many of the rural communities in terms of improvement in their environmental conditions, increased production and earnings, and even of changes in their attitudes and habits. Although the impact of the Saemaul Education programmes is less visible, some of the successful cases give testimony to their contribution It is now generally accepted that Saemaul Movement, including Saemaul Education, is one of the most significant and successful policies in present-day Korea with a deep impact on Korean national development.

Specific features

Some of the specific features of the Korean Saemaul Movement, and Saemal Education, includes the following: (i) combination of central support and local initiative; (ii) emphasis upon increase of production and earnings as well as spiritual rejuvenation; and (iii) nation-wide implementation with top priority given among national policies

Source and contact persons

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Seoul, Republic of Korea

Senior Supervisor incharge of the Saemaul,
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Ministry of Education
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Dr. Jongchol Kim
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College of Education
Seoul National University
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7. TITLE : Institute for the Promotion of Teaching Science and Technology

Thailand

Background

The Institute was established in 1970 by the Government of Thailand with assistance from United National Development Programme and Unesco Its mandate is to develop Science and Mathematics curriculum at the school level, promote new teaching and learning methods in science and mathematics in Thai schools and provide training services to teachers in cooperation with the teacher training institutes and the Ministry of Education.

The Institute started its work at the upper secondary stage and then gradually extended it to lower secondary stage The curriculum and materials developed by the Institute are being first tried out in 20-30 schools in Bangkok and neighbouring provinces. An experimental—developmental phase of about 3 years is envisaged before the new curricula are to be applied to schools all over the Kingdom

Implementation

After the preliminary work of recruiting personnel and organizing administrative services had been completed, subject committees were formed for each subject area. Each committee consists of teachers, supervisors, instructors from teachers colleges, and spacialists from the universities. The work of each subject committee was backed up by appropriate academic services, such as Tests and Measurement, Equipment Design and Construction etc. Particular attention was given to close coordination among various subject committees. The subject committees followed generally the same pattern of work

Determination of general and behavioural objectives

Lay-out of new curriculum.

Identification of methods of teaching and evaluation

Preparation of draft textbooks and teachers' guides

Review and revision of draft textbooks and teachers' guides

Mini trial of lessons with students and collection of data

Revision of textbooks and teacher's guides

In-Service Training of teachers in experimental schools to understand the new curriculum, methods of teaching and evaluation

Further revision of textbooks and teachers' guides in the light of data collected in experimental teaching.

The timing of curriculum developments has been scheduled as follows ·

		Experiment	*Application to all schools*
1.	Science, upper secondary	1973	1976
2	Science, lower secondary	1974	1976
3.	Mathematics, upper secondary	1974	1977
4.	Mathematics. lower secondary	1975	1978
5.	Mathematics, upper elementary	1975	1978
6.	Mathematics, lower elementary	1974	1977

The preparation of textbooks, teachers' guides and teaching materials to be used in experimental schools have mostly been completed and the rest are underway. The following check-list may provide a clearer picture .

Science		*Finished*	*Underway*
Upper Secondary			
Physics		X	—
Chemistry		X	—
Biology		X	—
Physical Science		—	X
Lower Secondary			
General Science	M.S 1	X	—
	M.S 2	X	—
	M.S.3	—	X

Mathematics

Upper Secondary	M S.4	X	—
	M.S.5	X	
Lower Secondary	M S.1	X	—
	M S,2	—	X
	M.S 3	—	X
Upper Elementary	P 5	X	—
	P. 6	—	X
Lower Elementary	P 1	X	—
	P. 2	X	
	P: 3	—	X
	P. 4	—	X

The in-service training of teachers at upper secondary level will be carried out by the Institute directly. For the training of teachers in the lower secondary classes, it is planned to provide in-service programmes in 10 Teachers Colleges in the provinces and 3 in Bangkok. Alongwith in-service training, the Institute is working closely with teachers colleges and faculties of Education of the Universities for reorganization of pre-service training of science teachers.

APPENDIX III

Educational Structure in the four countries

A Philippines

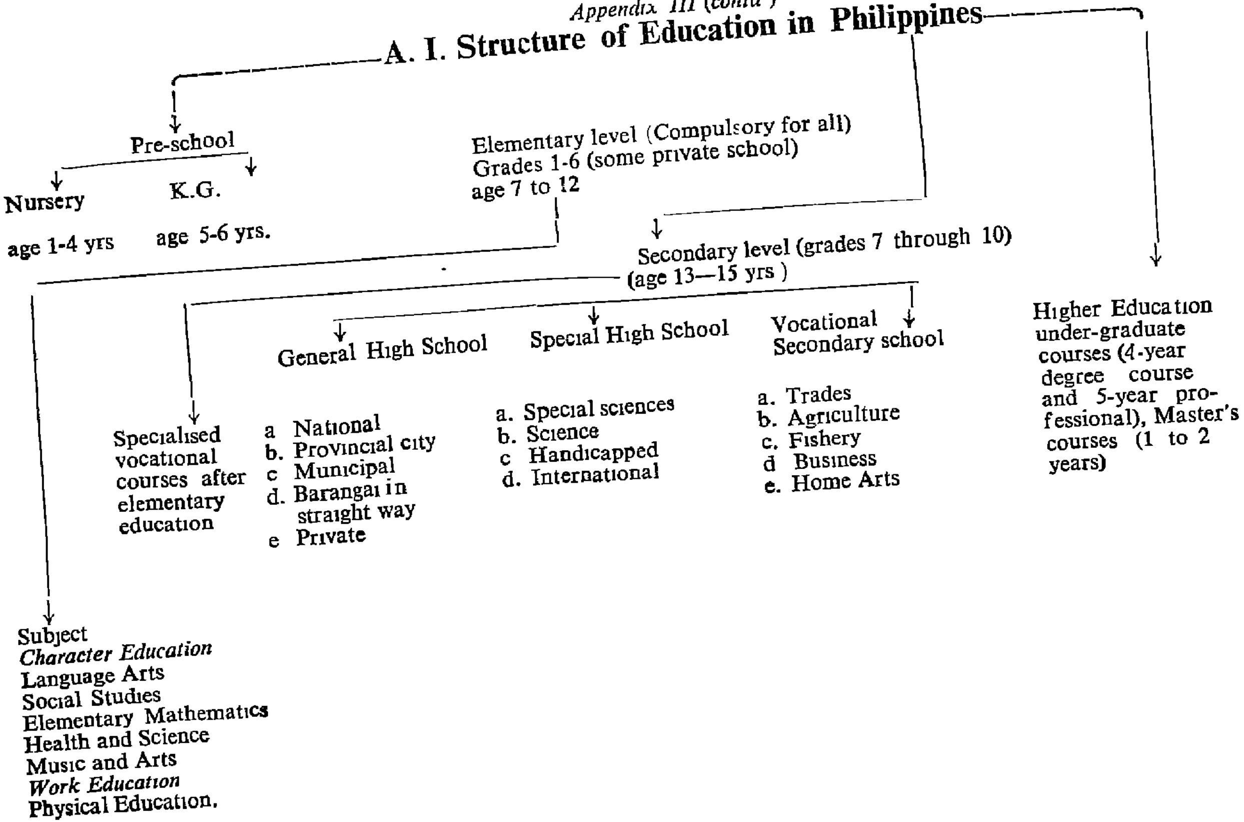
B. Japan

C Republic of South Korea

D. Thailand

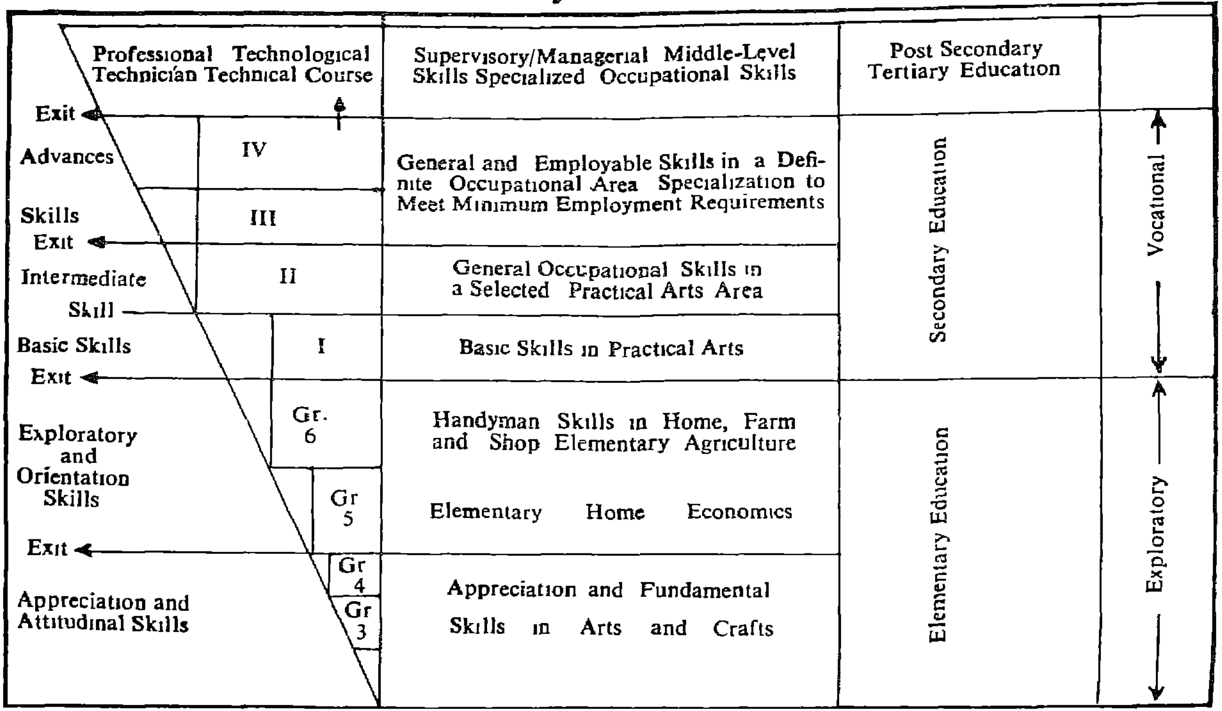
Appendix III (contd)

A. I. Structure of Education in Philippines



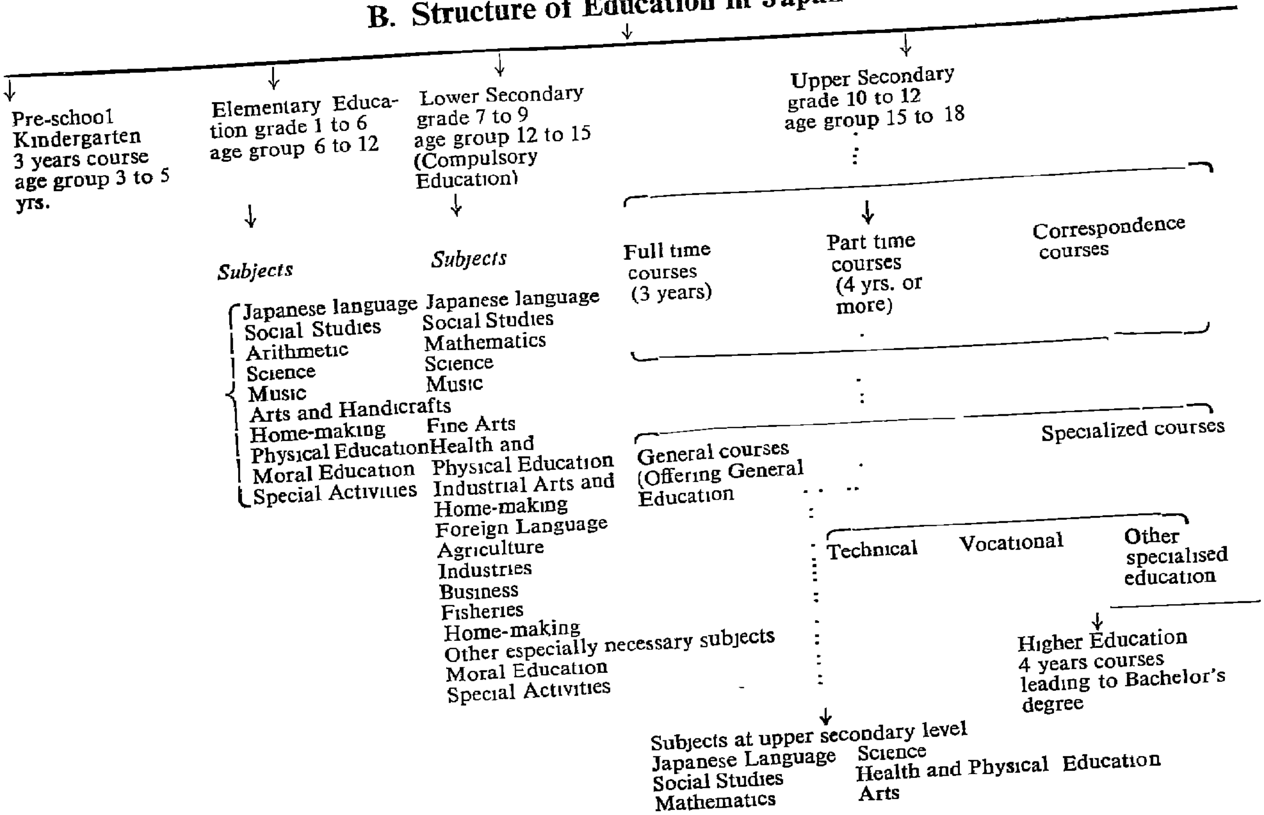
Appendix III (contd)

A. II. Chart showing gradual emphasis on Practical Arts/Vocational Education at different levels of revised Secondary Curriculum in Philippines.


Professional Technological Technician Technical Course
Supervisory/Managerial Middle-Level Skills Specialized Occupational Skills
Post Secondary Tertiary Education
Exit
Advances Skills
IV
III
General and Employable Skills in a Definite Occupational Area Specialization to Meet Minimum Employment Requirements
Exit
Intermediate Skill
II
General Occupational Skills in a Selected Practical Arts Area
Basic Skills
I
Basic Skills in Practical Arts
Secondary Education
Vocational
Exit
Exploratory and Orientation Skills
Gr. 6
Handyman Skills in Home, Farm and Shop Elementary Agriculture
Gr 5
Elementary Home Economics
Exit
Appreciation and Attitudinal Skills
Gr 4
Gr 3
Appreciation and Fundamental Skills in Arts and Crafts
Elementary Education
Exploratory

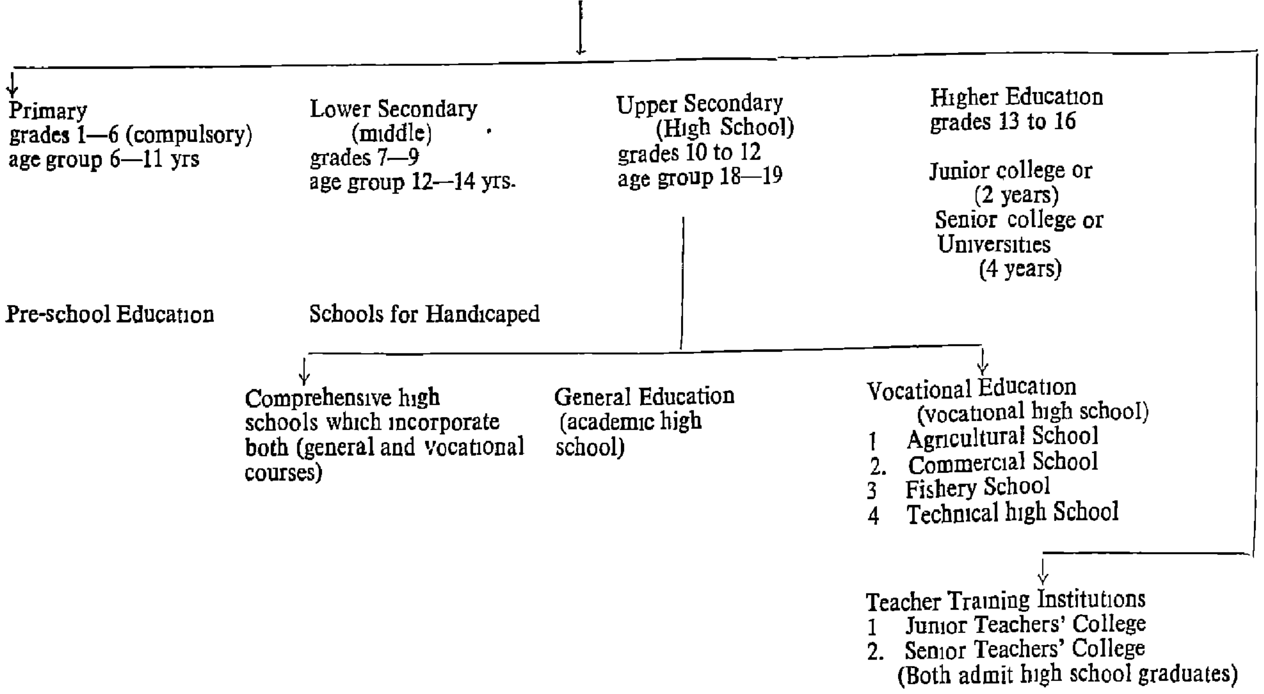
Appendix III (contd)

B. Structure of Education in Japan



Appendix III (contd.)

C. Structure of Education in Republic of South Korea (School System)



(*i*) Primary School Curriculum →

- Moral Education, Arithmetic, Music
- Korean Language, Nature, Fine Arts
- Social Studies, Physical Education, Practical Arts

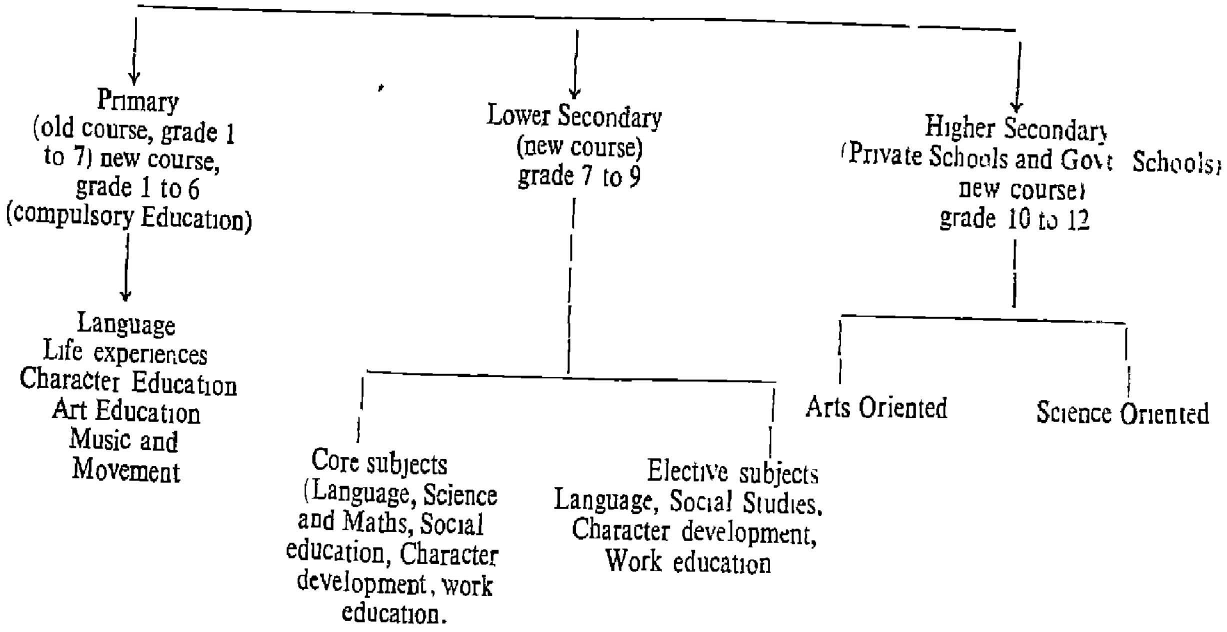
(*ii*) Secondary Education

- Middle School—11 subjects
  - Moral Education
  - Social Studies
  - Physical Education
  - Chinese Characters'
  - *Vocational Subjects* ·
  - Korean Language
  - Mathematics
  - Music
  - English
  - Skill (Male)
  - Home Economics (for girls)
  - Korean History
  - Science
  - Fine Arts
  - Elective subjects :
    - One of the three subjects (boys) Agriculture, Industrial Skill and Fishery
    - Home Works (for girls)
- Academic High School
  - regular and elective subjects alongwith extra-curricular activities
- Vocational High School
  - Agricultural High School
  - Commercial High School
  - Technical High School
  - Marine High School
  - Fishery High School

1. National and Public
2. Private

Appendix III (contd.)

D. Structure of Education in Thailand


Primary
(old course, grade 1 to 7) new course, grade 1 to 6 (compulsory Education)
Language
Life experiences
Character Education
Art Education
Music and Movement
Lower Secondary
(new course)
grade 7 to 9
Core subjects
(Language, Science and Maths, Social education, Character development, work education.
Elective subjects
Language, Social Studies, Character development, Work education
Higher Secondary
(Private Schools and Govt Schools)
new course)
grade 10 to 12
Arts Oriented
Science Oriented

APPENDIX IV

Publications Related to Currriculum for Development.

(Available from Unesco, Bangkok)

1. Teacher education and curriculum for development 1975.
2. Science in basic functional education; approaches, methods and materials, 1975.
3. Science in basic functional education . links with real-life situations, 1975.
4. Curriculum development for work-oriented education (in collaboration with NIER, Tokyo), 1976.
5. Co-operation in curriculum explorations, 1975
6. Towards strategies of curriculum change, 1976
7. Lifelong education the curriculum and basic learning needs, 1976
8. Integrated approach to curriculum development in primary education in Sri Lanka (in collaboration with IBE) 1976
9. Integrated science in the junior secondary school in Sri Lanka (in collaboration with IBE) 1976
10. Curriculum for development: analysis and review of processes, products and outcomes, 1976.
11. School science education in India (Curriculum Development Centres series No. 1) 1977.
12. Implementing Curriculum Change: A symposium of experiences from the Asian region, 1977